

Work Order ID 157946

Monday, March 06, 2017 11:20:24 AM

157946

Page 1

Item ID: D2989-5

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Rib

Start Date: 3/6/2017

Start Qty: 2.00

2

Cust Item ID:

Required Date: 3/8/2017

Req'd Qty: 2.00

2

Customer:

Reference:

Approvals:

Process Plan:

DAS
21
9-89

Date: MAR 06 2017

Tooling:

Date:

Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

Draw Nbr

Revision Nbr

D2989

Rev D

100

0.00

100

Large Fab

Large Fab

Memo

0.09

Large Fab

1- pick D3166-3 to cut D2989-5 rib as per dwg D2989 using DT9442 jig2-
remove identification markings3- deburr

2 Cpl 17-03-06

110

QC6- Inspect dimensions to drawing

0.00

110

QC

Memo

0.00

Quality Control

2 MAR 06 2017 Cpl

120

Identify as per dwg & Stock Location: WAH

0.00

120

Packaging

Memo

0.00

Packaging

LOCATION WA004

2 MAR 06 2017 Cpl

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	

Root Cause				FAULT CATEGORY			
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐		
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐		
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐		
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐		
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐		
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐		
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐		
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐		
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐		
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐		
Past Expiry Date ☐	Manufacturing Process ☐	OTHER :					
Misidentified ☐	Past Due ☐						

Work Order ID 157946

Monday, March 06, 2017 11:20:24 AM

157946

Page 2

Item ID: D2989-5

Revision ID:

Item Name: Rib

Start Date: 3/6/2017 Start Qty: 2.00

Required Date: 3/8/2017 Req'd Qty: 2.00

Reference:

Accept

N900040100Setup Start ***NS1***Stop ***NS2***

Cust Item ID:

Customer:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start ***NR1***

QC:

Date:

SPC (Y/N):

Date:

Stop ***NR2***Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

130

QC21- Final Inspection - Work Order Release

0.00

130

QC

Memo

0.03

Quality Control

DAS
21
9-89

MAR 07 2017

DAS
21
9-89

MAR 06 2017

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date : _____		Step #: _____		QTY Effective : _____			MRB (QSI042) Approval 		
Description Work Order Deviation				Disposition					
							Completed By		
							Lead hand / Supervisor Approval Verification		
							QC / QA Coordinator Approval		

Root Cause				FAULT CATEGORY			
Environment ☐		No Re-verification ☐		Pressure/Forced ☐		Temperature/Cure ☐	
Design ☐		Operator ☐		Bending ☐		Set-up ☐	
Doc/Data ☐		Offset/Setup ☐		Centre Not Concentric ☐		BOM/Route ☐	
Equip/Tooling ☐		Supplier ☐		Cracks ☐		Broken/Damage/Defect ☐	
Handling/Pre ☐		Training ☐		Crimp/Kink/Ripple/Wave ☐		Inspection Incomplete/Unqualified ☐	
Material ☐		Use for Testing ☐		Cuffs ☐		Contamination ☐	
Internal Transport ☐		Poor Information ☐		Crushing ☐		Countersink ☐	
Tribal Knowledge ☐		Rushing ☐		Heat Treat ☐		Cut Too Short ☐	
LOA ☐		Product Improvement ☐		Wave/Twist in Tube ☐		Instructions Incomplete/Unclear ☐	
Substation ☐		Process Improvement ☐		Marks/Chatter ☐		Drill Holes ☐	
Past Expiry Date ☐		Manufacturing Process ☐		OTHER : _____			
Misidentified ☐		Past Due ☐					

Picklist Print

Monday, March 06, 2017 11:20:30 AM

Page 1
1

Work Order ID: 157946

157946

Parent Item: D2989-5

D2989-5

Parent Item Name: Rib

Start Date: 3/6/2017

Required Date: 3/8/2017

Start Qty: 2.00

Required Qty: 2.00

Comments: IPP Rev:A 08-12-02 new issue DD verified by:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D3166-3		Manufactured	No			100	Each	4.0000	0.08	1			

✓ *D3166-3*
Basket Hoop

**

cy 17-03-06

Location

WA004

153888

Loc Qty

4

4

Loc Code

1

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date : _____		Step #: _____		QTY Effective : _____			MRB (QSI042) Approval 		
Description Work Order Deviation				Disposition					
							Completed By		
							Lead hand / Supervisor Approval Verification		
							QC / QA Coordinator Approval		

Root Cause				FAULT CATEGORY			
Environment ☐		No Re-verification ☐		Pressure/Forced ☐		Temperature/Cure ☐	
Design ☐		Operator ☐		Bending ☐		Set-up ☐	
Doc/Data ☐		Offset/Setup ☐		Centre Not Concentric ☐		BOM/Route ☐	
Equip/Tooling ☐		Supplier ☐		Cracks ☐		Broken/Damage/Defect ☐	
Handling/Pre ☐		Training ☐		Crimp/Kink/Ripple/Wave ☐		Inspection Incomplete/Unqualified ☐	
Material ☐		Use for Testing ☐		Cuffs ☐		Contamination ☐	
Internal Transport ☐		Poor Information ☐		Crushing ☐		Countersink ☐	
Tribal Knowledge ☐		Rushing ☐		Heat Treat ☐		Cut Too Short ☐	
LOA ☐		Product Improvement ☐		Wave/Twist in Tube ☐		Instructions Incomplete/Unclear ☐	
Substation ☐		Process Improvement ☐		Marks/Chatter ☐		Drill Holes ☐	
Past Expiry Date ☐		Manufacturing Process ☐		OTHER : _____			
Misidentified ☐		Past Due ☐					

D2989-043 BASKET LID ASSEMBLY
(MESH SHOWN LOCALLY FOR CLARITY)

D2989-041 BASKET LID ASSEMBLY
(MESH SHOWN LOCALLY FOR CLARITY)

- NOTES:
1) MATERIAL: N/A
2) FINISH: POWDER COAT WHITE (4.3.5.2) PER DART QSI 005 4.3
BLACK ANTI-SKID PAINT AS INDICATED PER DART QSI 005 4.4
SPRAY PAINT INSIDE SURFACE BLACK PRIOR TO APPLYING ANTI-SKID
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: N/A
7) WEIGHT: D2989-041 = 26.50 lbs; D2989-043 = 15.50 lbs
8) WELD PER DART QSI 004

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 157946 MJS
1703-06

ITEM	QTY -041	QTY -043	P/N	DESCRIPTION
1	X		D2989-041	BASKET LID ASSEMBLY
2		X	D2989-043	BASKET LID ASSEMBLY
3	1		D2506	LABEL PLATE
4	1		D2512-7	RIB
5	2		D2581	MOUNTING BRACKET
6		1	D2989-3	RIB
7		1	D2989-4	RIB
8		2	D2989-5	RIB
9	2		D2989-13	RIB
10	2	1	D2989-17	RIB
11	2		D2989-19	RIB
12		2	D3182-1	HINGE
13		2	D3442-3	SHIM
14		1	D3827-041	RIB ASSY (INBOARD)
15	1		D3832-3	MESH, BASKET LID
16		1	D3832-5	MESH, BASKET LID
17	2		D3833-3	MESH, LID END
18		2	D3833-5	MESH, LID END
19	1		D3836-041	RIB ASSY (BASKET LID, LH)
20	1		D3836-042	RIB ASSY (BASKET LID, RH)
21		1	D3838-041	RIB ASSY (BASKET LID, LH)
22		1	D3838-042	RIB ASSY (BASKET LID, RH)
23	1		D3852-041	RIB ASSEMBLY
24	1		D3852-042	RIB ASSEMBLY

RELEASED
08/11/18 MJS

D	REVISED -041/-043 PARTS LISTS AND ADDED "ITEM" COLUMN TO PARTS LIST (ZN D3-1); D3836-041 REPLACES D2989-9/-15; D3836-042 REPLACES D2989-10/-15; D3838-041 REPLACES D2989-1/-7; D3838-042 REPLACES D2989-2/-7; D3852-041 REPLACES D2989-11; D3852-042 REPLACES D2989-2, REMOVED D2327-3 (NOW INSTALLED ON D3836 DWG), D2989-9/-10 (NOW ON D3836 DWG), D2989-1/-2/-7/-15 (NOW ON D3836 DWG) AND D2989-11/-12 (NOW ON D3852 DWG) REASON: TO SATISFY "LEAN MANUFACTURING" PROGRAM	MB	08.09.24
C	FRAME MATERIAL WAS 0.060 WALL; MESH MATERIAL UPDATED; DRAWING TRANSFERRED TO "B" FORMAT AND CURRENT DRAFTING STANDARD	AJS	08.06.20
B	ADD SHIM UNDER HINGES, UPDATE LID DIMENSIONS	PH	05.06.07
A	NEW ISSUE	DS	00.10.27
REV.	DESCRIPTION	BY	DATE
DESIGN	DS	DART AEROSPACE LTD	
DRAWN	DS	HAWKESBURY, ONTARIO, CANADA	
CHECKED	DS	DRAWING NO.	REV. D
MFG. APPR.	DS	D2989	SHEET 1 OF 5
APPROVED	DS	TITLE	SCALE
DE APPR.	DS	BASKET LID ASSEMBLY	NTS
DATE	08.09.24	COPYRIGHT © 2000 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

8

7

6

5

4

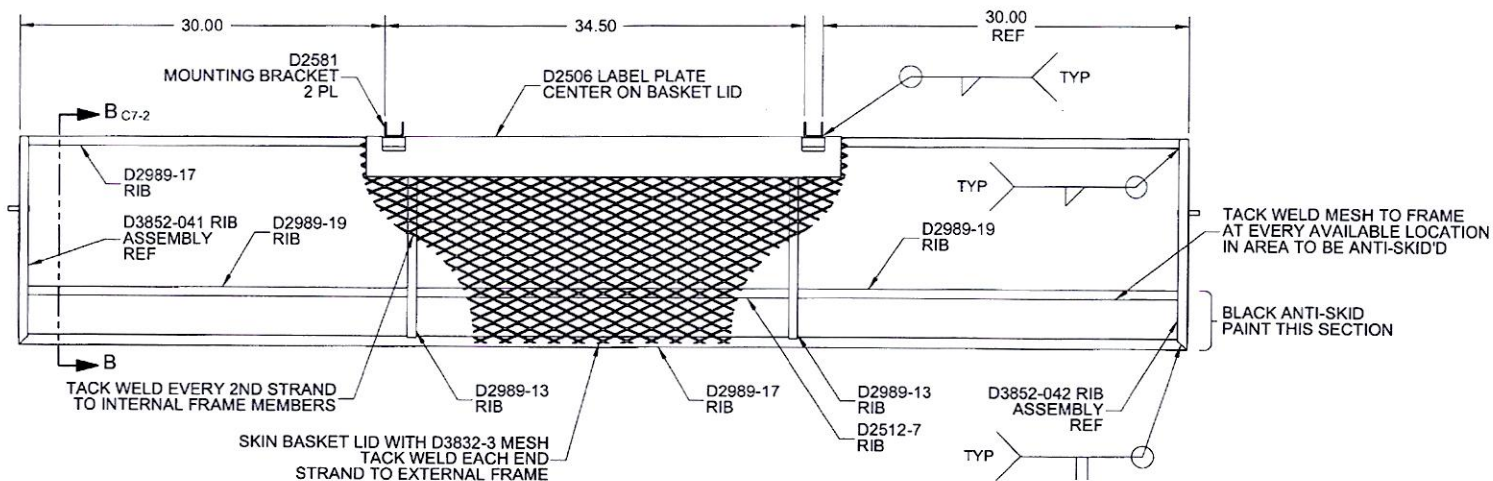
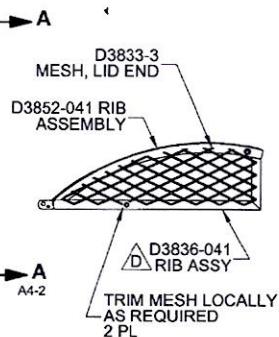
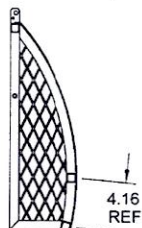
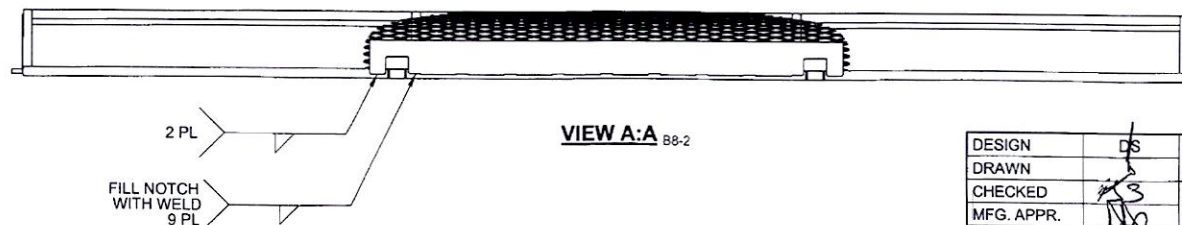
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2

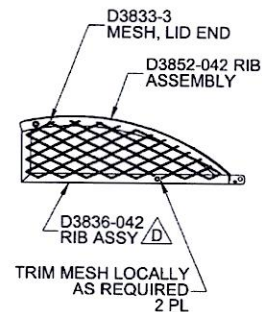
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SECTION B-B

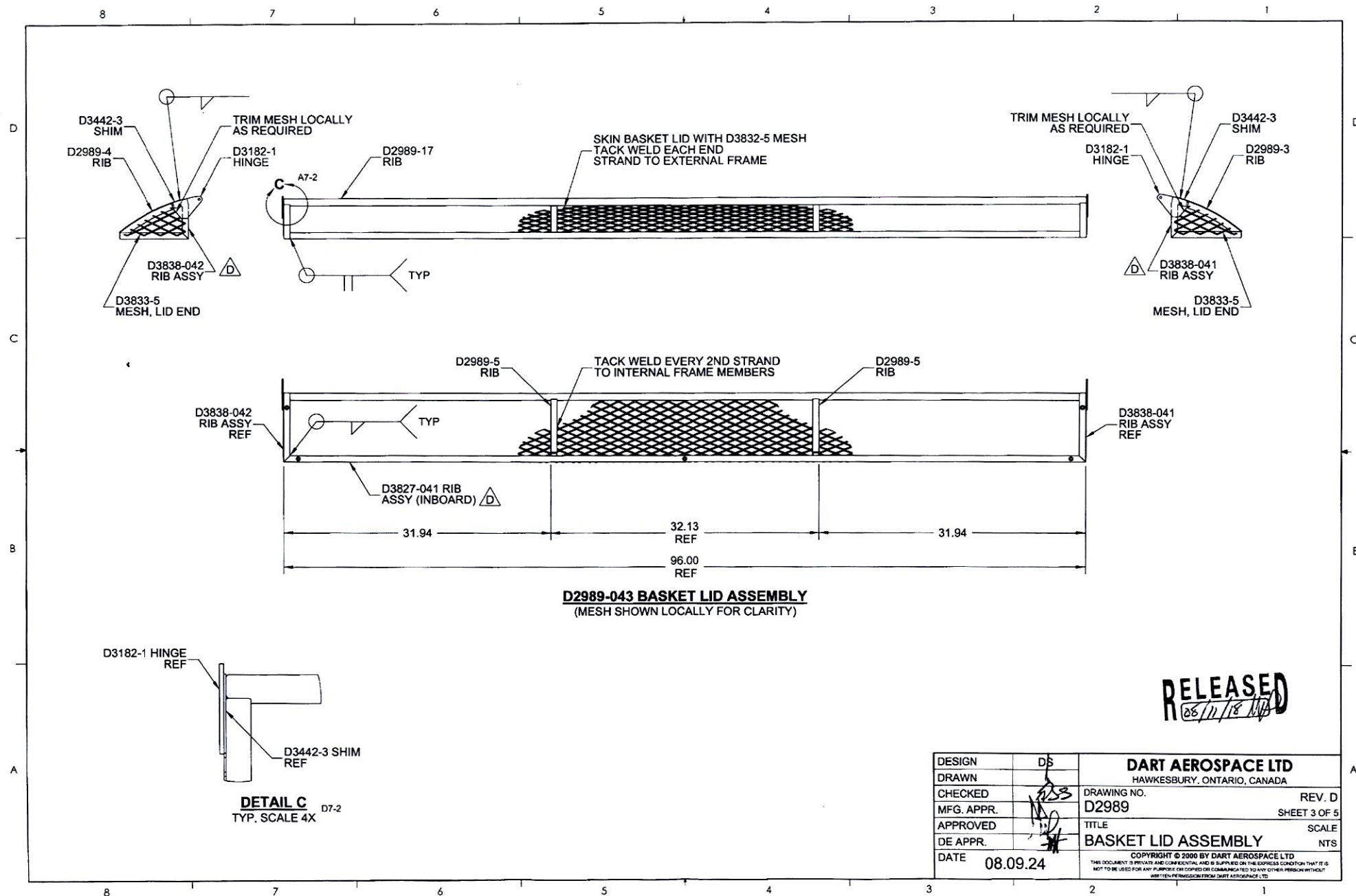
D7-2

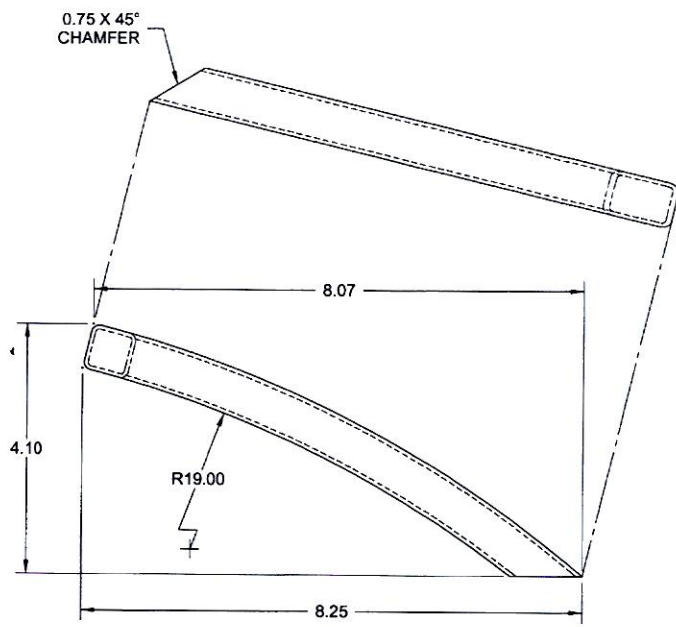
TACK WELD MESH TO LABEL PLATE
AT EVERY AVAILABLE LOCATIOND2989-13 RIB
REF32.13
REF
96.00
REFD2989-13 RIB
REF**D2989-041 BASKET LID ASSEMBLY**
(MESH SHOWN LOCALLY FOR CLARITY)**VIEW A-A**

B8-2

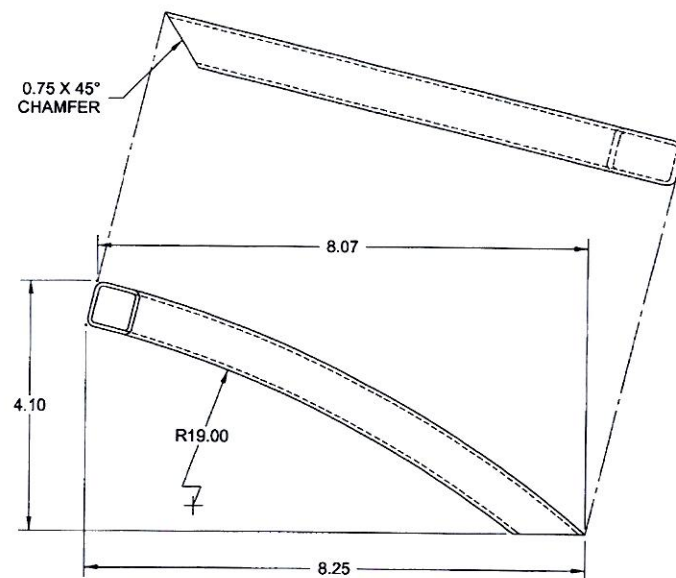
**RELEASED**
08/11/18/19

DESIGN	DS	DART AEROSPACE LTD	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO. D2989	REV. D
MFG. APPR.			SHEET 2 OF 5
APPROVED		TITLE	SCALE
DE APPR.		BASKET LID ASSEMBLY	NTS
DATE	08.09.24	COPYRIGHT © 2000 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

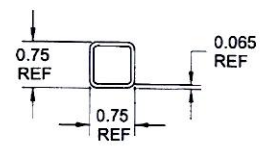




D2989-3 RIB



D2989-4 RIB

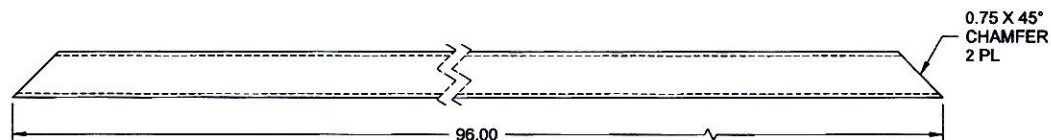
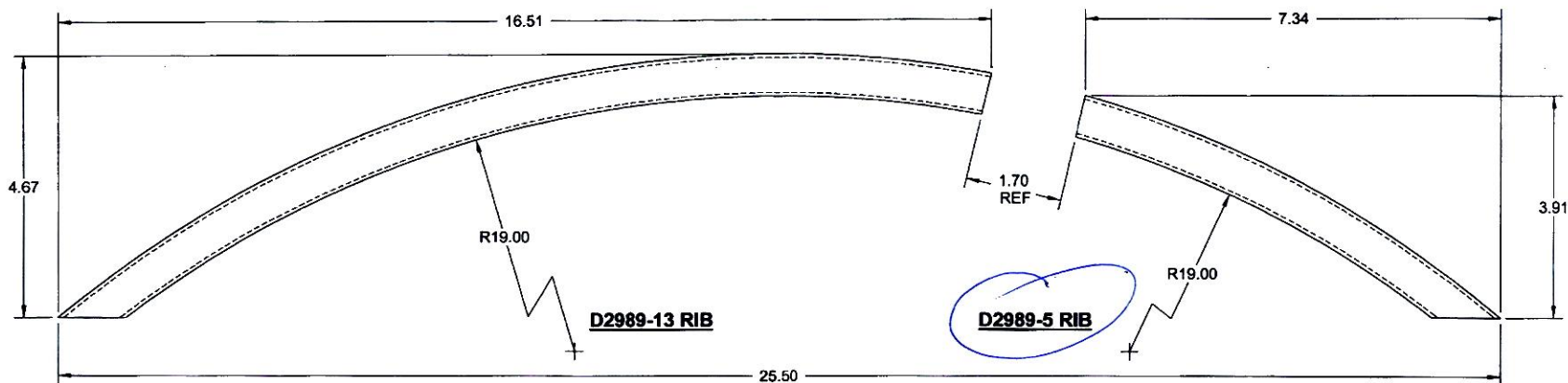


TYPICAL SECTION VIEW

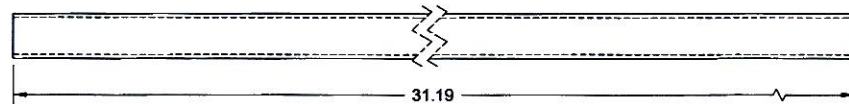
- NOTES:**
- 1) MATERIAL: D3166-3 BASKET HOOP
 - 2) FINISH: NONE
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: N/A
 - 8) WEIGHT: D2989-3/-4 = 0.39 lbs;

RELEASED
08/11/18/11

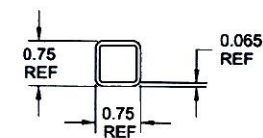
DESIGN	DS	DART AEROSPACE LTD	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. D
MFG. APPR.		D2989	SHEET 4 OF 5
APPROVED		TITLE	SCALE
DE APPR.		BASKET LID ASSEMBLY	NTS
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D2989-17 RIB



D2989-19 RIB



**TYPICAL SECTION
VIEW**

RELEASED
08/11/18/VW

NOTES:

- 1) MATERIAL: AISI 304/316 STAINLESS STEEL SQUARE TUBE, 0.75 X 0.75 X 0.065 WALL
REF. DART SPEC. M304TS0.750W0.065
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 8) WEIGHT: D2989-5 = 0.37 lbs; D2989-13 = 0.81 lbs; D2989-17 = 4.57 lbs; D2989-19 = 1.50 lbs

DESIGN	DS	DART AEROSPACE LTD	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED	SS	DRAWING NO.	REV. D
MFG. APPR.		D2989	SHEET 5 OF 5
APPROVED	NJ	TITLE	SCALE
DE APPR.		BASKET LID ASSEMBLY	NTS
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